Please amend the application as follows:

IN THE TITLE

Please replace the current title, "ROUTING METHOD AND APPARATUS THAT UTILIZE DIAGONAL ROUTES," with "LP METHOD AND APPARATUS FOR IDENTIFYING ROUTE PROPAGATIONS."

IN THE SPECIFICATION

Please delete the "Claim of Benefit to Prior Application" on page 1, lines 1-11, and insert therein a new Claim of Benefit to Prior Applications as follows:

--**CLAIM OF BENEFIT TO PRIOR APPLICATIONS**

This application is a continuation application of United States Patent Application entitled "Routing Method and Apparatus that Utilizes Diagonal Routes," filed on December 7, 2001, and having serial number 10/013,819. This patent application also claims the benefit of the earlier-filed U.S. Provisional Patent Application entitled "Method and Apparatus that Utilize Diagonal Routes", having serial number 60/325,748, and filed 1/19/2001; U.S. Provisional Patent Application entitled "Routing Method and Apparatus", having serial number 60/314,580, and filed 8/23/2000; and U.S. Provisional Patent Application entitled "Routing Method and Apparatus", having serial number 60/337,504, and filed 12/6/2001--

Please delete the "Field of the Invention" on page 1, lines 10-12, and insert therein a new Field of the Invention as follows:

--**FIELD OF THE INVENTION**

Q2 The invention is directed towards LP method and apparatus for identifying route propagations.--

On page 5, lines 1-8, please delete the "Summary of the Invention", and insert therein a new Summary of the Invention as follows:

--**SUMMARY OF THE INVENTION**

Some embodiments provide an LP method that identifies route propagations. In some embodiments, this method is used by a router that hierarchically defines routes for nets within a region of a design layout. The router (1) partitions the region into a first set of sub-regions, and (2) for each particular net, identifies a route that traverses a set of the first-set sub-regions. In some embodiments, the invention's method partitions the first set of sub-regions into a second set of smaller sub-regions. It then identifies a plurality of propagation possibilities for propagating each route into the second set of smaller sub-regions of the first set sub-regions. The method next formulates a linear-programming ("LP") problem based on the identified propagation possibilities. The method then solves the LP problem.

Q3